Met Office leads multi-million pound research into Africa's changing climate

29 October 2015 - The Met Office is leading a new research programme to improve the understanding of Africa's climate

It is aimed at helping to provide high-quality climate information that is crucial for effective decision making across the continent.

Improving Model Processes for African Climate (IMPALA) will lead to a step-change in global climate model prediction capability, which until now has not been available across many parts of sub-Saharan Africa.

Through an improved understanding of African climate processes and the mechanisms of future change, information and findings from IMPALA will help decision-makers reduce climate-related risks. For example, infrastructure can be re-designed to account for high temperatures and changing rainfall, while health, education and social support systems, and local planning decisions could be designed to cope with future climate conditions.

Dr Cath Senior, Principal Investigator on IMPALA, said: "By delivering a step change in global climate model capability for Africa and new information about the role of previously unresolved processes driving regional climate variability and change over the continent, the IMPALA project will put in place a key building block to empower decision-makers with information that can be used to reduce risks to health, water resources and agriculture and help protect the livelihoods of the most vulnerable."

IMPALA is part of a £20 million UK government-backed initiative entitled Future Climate for Africa (FCFA). The FCFA programme supports world-leading science and technology to enhance understanding and prediction of sub-Saharan African climate and, through working closely with African stakeholders, bring this knowledge into use in informing major policy decisions.

In addition to the Met Office's lead role in IMPALA, Met Office scientists are also contributing to three other FCFA projects in southern, eastern and western Africa including:

- **Future Resilience for African Cites and Lands** (FRACTAL) will improve scientific knowledge of future climate trends in Southern Africa, deepen urban policy-makers' understanding of how climate change will affect water and energy services, and support them to explore climate-resilient development choices.
- **African Monsoon Multidisciplinary Analysis 2050** (AMMA-2050) will improve understanding of how the West African monsoon will be affected by climate change in the coming decades - and help West African societies prepare and adapt.
- **Integrating Hydro-Climate Science into Policy Decisions for Climate-Resilient Infrastructure and Livelihoods in East Africa** (HyCRISTAL) will develop new understanding of climate change and its impacts in East Africa, working with the region's decision-makers to manage water for a more climate-resilient future.

Last updated: 26 April 2016